

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB2004/000002

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C02F3/08 C02F3/22

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 39 16 520 A (ZIMMER ERICH HELMUT) 22 November 1990 (1990-11-22) column 4, line 34 - line 60; figures 2,3	1,4,6,7, 11-13
X	US 4 139 456 A (YABUCHI EIZO ET AL) 13 February 1979 (1979-02-13) figures 2,3	1,2, 11-13
Y	PATENT ABSTRACTS OF JAPAN vol. 015, no. 289 (C-0852), 23 July 1991 (1991-07-23) & JP 03 101896 A (TOSHIBA CORP), 26 April 1991 (1991-04-26) abstract	1,2,5, 11-14
Y	US 6 036 863 A (BROCKDORFF KNUD PETER) 14 March 2000 (2000-03-14) abstract; figure 1	1,2,5, 11-14
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

28 September 2004

Date of mailing of the international search report

04/10/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 196 33 629 A (IBERO ANLAGENTECH GMBH) 26 February 1998 (1998-02-26) figure 6 -----	16
X	DE 35 16 617 A (BAENSCH TETRA WERKE) 13 November 1986 (1986-11-13) figure IVa -----	16
X	GB 360 272 A (FRIEDRICH SCHIMRIGK) 5 November 1931 (1931-11-05) figure 2 -----	16

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2004/000002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 3916520	A	22-11-1990	DE 3916520 A1	22-11-1990
			DE 8906830 U1	13-09-1990
			DE 9007600 U1	04-03-1993
			EP 0399380 A1	28-11-1990
US 4139456	A	13-02-1979	JP 1167514 C	08-09-1983
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			CA 1076721 A1	29-04-1980
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			EP 0772571 A1	14-05-1997
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			WO 9807663 A1	26-02-1998
			DE 59703366 D1	17-05-2001
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			HU 0000640 A2	28-07-2000
			PL 331584 A1	19-07-1999
			PT 944554 T	28-09-2001
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GB 360272	A	05-11-1931	NONE	

**Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-15

waste water treatment plant including a treatment chamber containing carrier elements; a settlement chamber; a vertical column disposed in said treatment chamber; air delivery means into a lower region of said column  
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2. claims: 16,17

sludge carrier element of spherical form with a central bore  
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